

DETAILED ACTION
EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the claims

Cancel claims 11-49.

Allowable Subject Matter

Applicant has amended the independent claim 1 to overcome the prior art rejection of the previous office action. Claims 1-10 are allowed. The following is an examiner's statement of reasons for allowance:

The prior art of record does not disclose or suggest either in singularly or in combination the following limitations and other elements in the claims:

References Geusic et al. (US 6,777,715) and Kikuchi et al. (US Pub. 2003/0142896) do not disclose:

- The through vertical cylindrical via having sidewall covered with a layer of low refractive index material comprising a cladding layer on the sidewalls being

substantially or fully filled with a high refractive index material to form a core layer, where the refractive index of the materials are different in refractive index between about 0.01 and 2.

Reference Cheng et al. (US 6,836,020) do not disclose:

- The through vertical cylindrical via having sidewall covered with a layer of low refractive index material.

Therefore, the above references do not disclose the claimed invention of present application and claims 1-10 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai-Sing Louie whose telephone number is 571-272-1709. The examiner can normally be reached on 7:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2814

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wai-Sing Louie/
Primary Examiner, Art Unit 2814

Wsl
January 8, 2008.